October 8, 2004 Vol. 43, No. 20



Spaceport News

America's gateway to the universe. Leading the world in preparing and launching missions to Earth and beyond.

http://www-pao.ksc.nasa.gov/kscpao/snews/snewstoc.htm

John F. Kennedy Space Center

Kennedy appreciates work force's attitude after hurricanes

By Jeff Stuckey Editor

s Hurricane Jeanne left Brevard County, the collective sighs of relief from Kennedy Space Center's workers couldn't match the loud winds they'd endured for hours.

Just as some employees' homes sustained little damage while others were less fortunate, several KSC facilities were nearly unscathed and others suffered noticeable damages.

At home and at work, however, the same shared thought seemed to prevail: We're going to move on and keep focusing on accomplishing our goals.

"There are sunny days ahead, in part because of the work force's attitude, which has always shown a positive, can-do spirit," KSC Director Jim Kennedy said. "They've been through hardships after losing Challenger and Columbia. They've also endured an unprecedented number of hurricanes in this state.

"But I think because of the attitude of the work force, the support we've enjoyed from our leadership at NASA Headquarters and the support from our federal and state government, we will press on and be better than ever."

In spite of the strong winds and heavy rain that Hurricane Jeanne brought to the area on Sept. 25 and 26, KSC fared reasonably well. Kennedy is focused on repairing facilities that will be used to return the Space Shuttle fleet to safe flight.

"Given that our number one priority at the Center is Return to Flight, we want to focus on those facilities necessary to facilitate that," Kennedy said. "The Thermal Protection System Facility has already moved most of its material to the Reusable Launch Vehicle Hangar. Beyond that, we must repair the Vehicle Assembly Building."

Director of Spaceport Services Scott Kerr has already begun temporary repair measures for the holes in the VAB so



KSC DIRECTOR Jim Kennedy appreciates the hurricane recovery efforts of all Spaceport employees, including these workers rebuilding the Thermal Protection System Facility that lost its roof.

employees can begin to process STS-114. Another high priority is being handled by Space Gateway Services, which is working to repair damaged areas so employees can move back into their work areas.

Kennedy made his first observation of the Center at 10 a.m. Sept. 26 by helicopter with Wayne Kee, the director of the Emergency Operations Center. "I felt great relief after my first tour because Jeanne was targeted to be a category 3 or 4 direct hit at the Center, but because the storm continued on its western path and entered 61 miles south, we were spared the brunt of the hurricane-force winds," Kennedy said. "The VAB only lost an

(See JEANNE, Page 2)

VAB repair and processing continues

By Jeff Stuckey Editor

orkers repairing 80 holes left in the side of the Vehicle Assembly Building from Hurricanes Frances and Jeanne are proud to contribute to returning the Space Shuttle to flight.

"When this project came about, we were very enthusiastic about helping any way we could," said Jeff Gibson, manager for the subcontractor Met-Con. "This is what we do. We grew up in this area and have watched the Space Program.

When these circumstances



happen, it truly affects us and everybody we know."

The first phase of recovery was to patch the holes, approxi-

mately 3 feet by 6 feet, so steel panels were installed to stop the wind from blowing through the building.

"That's a restriction to processing the external tanks of the Space Shuttle and for performing

crane operations," said Scott Kerr, director of Spaceport Services. "The permanent repairs

(See VAB, Page 2)

Space Shuttle Return to Flight date to change

ASA is working to determine how four hurricanes that affected several Centers this year will impact efforts to return the Space Shuttle to flight. Officials in NASA's human space flight program determined the March-April window is no longer achievable. The leadership council directed the Space Shuttle Program to assess how it would meet Return to Flight milestones for the next available launch window, which opens May 14, 2005. A new date will be determined at a late October council meeting.

2004 Combined Federal Campaign patriotically kicks off

By Linda Herridge Staff Writer

apoleon Carroll, Kennedy Space Center's Chief Financial Officer and this year's Combined Federal Campaign chairperson, welcomed a packed audience to the campaign's fund-raising program Sept. 30 in the Training Auditorium. NASA workers also viewed the event on NASA TV and, for the first time, on the Internet.

Carroll opened the program with words of welcome: "I'm thrilled to champion this year's campaign with the theme 'You Become the Hero...By Caring, Sharing and Giving.' And we're dedicating this campaign program to the heroes of our armed forces, the men and women who stand in harm's way."

KSC Director Jim Kennedy said the campaign is an exciting opportunity to give back to those in need. "It's all about people helping people. We recognize all the men and women in the audience who are serving their country in the armed services and reserves," he said.

"We are blessed at KSC to know that we have dedicated people who cherish the opportunity to help their fellow people in any way they can. It's all about being a part of the NASA family," Kennedy continued. "Your contribution, whether it's time, talent or money, is very much appreciated."

Kennedy added: "I am very proud of the KSC family when I think about the people who are helping to get us ready for Return to Flight. We are KSC and proud to be."

Susan McGrath, development director of United Way of Brevard, said: "Because of your past generosity, 34 percent of your gifts stayed in Brevard County last year. This year, we're going to have to lean on each other more than ever. We have to be a community like never before."

Charles Gambaro of the Cape Canaveral Spaceport Management Office served as a Colonel in the U.S. Army Reserve. He presented a slide show of photos he took during his year of service in Iraq. Many of the slides featured U.S. soldiers working with Iraqis. "Teamwork is the key to success," Gambaro said.

Sam Haddad, Industry Relations Office, sang "God Bless the USA" while Lisa Arnold, Ed Tugg, Nicole DelVesco and Kristy Durham performed the song in sign language.

Campaign Kick-off Keynote

Center for the storms," he said.
"Hardware was tape-wrapped,
expensive computer systems
were totally wrapped in plastic."

During the storm, Kennedy had the privilege of working with the Emergency Operations Center and the 225 people on the ride-out team, which included the U.S. Air Force.

"This was the first time the Air Force ride-out team was with us in the Emergency Operations Center at the Launch Control Center," Kennedy said. "It's a new agreement that would have taken place with Frances, but we did not have a ride-out team for that anticipated threat. It gave us a chance to really get to know our Air Force partners."

There were also many



NAPOLEON CARROLL (left), KSC chief financial officer and this year's Combined Federal Campaign chairperson, and Jim Kennedy (right), Center director, present CFC keynote speaker Danny McKnight a gift of appreciation.

Speaker Danny McKnight, who is retired from U.S. Army service, took the stage to deliver the final speech. "It is a privilege to be in your presence," he said. "I appreciate the opportunity to be sharing something with this community that I am very much a part of.

"CFC is a way to share with others, a way to give to others," said McKnight. "Your CFC will be successful because you're ready to take action. I respect you for that."

McKnight urged workers to focus on seven special values and to have commitment in order to make this year's CFC the most

members of the ride-out crew in facilities such as the Orbiter Processing Facility and the Space Station Processing Facility. "The ride-out crew was very impressive in that they all understood what their tasks were and worked throughout the night," Kennedy said.

"In the end, the ride-out crew did us a great service when, after making sure their families were safe and secure, they were totally focused on what to do during the storm to make sure the Center survived it."

With this challenge now a memory, Kennedy believes the Center will be stronger from this test.

successful in the campaign's history. The values are loyalty, duty, respect, selfless service, honor, integrity and personal courage. He asked everyone to apply these values to the CFC, adding that commitment only comes from one place: the heart.

Closing the program,
Kennedy said: "I would ask you
to recognize the needs within our
community, the state and our
country. Search your own
personal soul and do what is
right by you."

VAB (Continued from Page 1)

will put new panels over these areas and then the rest of the building will be checked and verified."

Work began Sept. 29 and was performed on two 10-hour shifts per day. The repairs are ongoing.

Working 200 to 500 feet in the air, installing steel panels on a spider-lift takes experience; Met-Con constructed the steel and siding at Launch Complex 37. "The employees are union iron workers from Local 808 in Orlando," Gibson said. "They do extensive training on safety and were recently retrained for the equipment they are working on."

"The ultimate goal is that we have to be safe and take care of the employees. At the same time, we are fully aware of the importance of getting this done."

JEANNE . . .

(Continued from Page 1)

additional 30 panels, there was virtually no loss of power and the facilities really weathered the storm well."

Part of the reason for this was because Hurricane Frances was much more traumatic than Jeanne. According to John Madura, NASA chief meteorologist, Jeanne had lower wind speeds, less duration in hours of winds over 50 mph and significantly less rainfall.

Kennedy is also proud of the way the work force prepared for the storm. "As we did with Hurricanes Charley and Frances, the employees did a beautiful job preparing the

Equal Opportunity's Aguilar departs for NASA Headquarters

By Jennifer Wolfinger Staff Writer

he people who make up NASA are as diverse as the Agency's mission objectives. Their various backgrounds provide an endless supply of fresh ideas and innovative results.

Ken Aguilar, the Center's exiting Equal Opportunity Office director, makes sure this steady flow of talent never stops. Because of his success, he assumed responsibilities as deputy assistant administrator of Diversity and Equal Opportunity (EO) at NASA Headquarters Oct. 4.

"The new challenges will be to bring my Center Human Resources, Equal Opportunity and Diversity experience to Headquarters, and assist with planning and working diversity programs that include recruitment, education and awareness," said Aguilar. "I am looking forward to the many opportunities that working at Headquarters



KEN AGUILAR, new deputy assistant administrator of Diversity and Equal Opportunity at NASA Headquarters.

provides, especially working with all the employees at the NASA Centers."

In this position, he supports the Institutions and Management organization and works with former Kennedy Space Center deputy director Jim Jennings. He's also pleased to work with Dorothy Hayden-Watkins, assistant administrator for EO and Diversity Programs.

Aguilar's diverse experiences

shaped him for this new role.

He held a supervisory position with the Ohio Youth Commission, where he discovered his fondness for working with people and problem solving.

"I began working at the Glenn Research Center several years later and have enjoyed every aspect of Human Resources work, including labor and employee relations," he explained. "I appreciate listening to people and providing guidance regarding programs, services and alternatives."

Under his leadership, KSC was recognized as the best federal government agency for diversity. He attributes this success to the Center's working groups, EO staff and Center management.

Additionally, the KSC Labor Management Partnership Council, which strives to make KSC the best and safest workplace, began during his time as KSC's Human Resources director.

While this new role will offer challenges and excitement,

Aguilar still cherishes his time at KSC.

"Kennedy Space Center and NASA are the best places to work anywhere. The people are outstanding. Their positive attitude and the fantastic accomplishments make you proud to be part of such an outstanding team," he said. "KSC has been such an exciting place to work, the people are willing to go the extra mile to accomplish any project or activity."

He's equally valued and missed by the Center.

"Kenny is a man of true integrity and unfailing belief in fairness and diversity," said Center Director Jim Kennedy.

"He wholly embraces NASA's values and we at KSC will truly miss his leadership. He will take these strong leadership qualities to his new assignment at NASA Headquarters, where I know he will continue to be a leader of positive change for the Agency. On behalf of KSC, I wish Kenny well-deserved success."

Expedition 8 commander shares Space Station experience

By Linda Herridge Staff Writer

ichael Foale, commander of the Expedition 8 mission to the International Space Station, shared tales of his six-month experience on the orbiting spacecraft with workers at Kennedy Space Center during a visit Sept. 21.

Using an informative slide and video presentation, Foale illustrated key mission events beginning with his launch - with flight engineer Alexander Kaleri on Oct. 18 last year from Baikonur Cosmodrome in Kazakhstan, Russia - through his return to Earth on April 29.

"It was an historic launch because it was the first Russian launch that included a completely civilian crew," Foale said to a packed audience in the Training Auditorium.

Highlights included his

training in Star City, Russia, docking to the Space Station and performing science experiments, repair work and space walks to complete maintenance tasks.

Foale wore a Russian Orlon suit and exited the Space Station from the Russian Pirs Docking Compartment airlock during one of his spacewalks to swap out microgravity environment experiments on the Zvezda Service Module.

Upon his return to Earth, Foale became the U.S. record holder for most cumulative time in space by logging 374 days, 11 hours and 19 minutes in space.

He flew on six Space Shuttle missions and performed four spacewalks totaling 22 hours and 44 minutes. Previous missions include STS-45, STS-56, STS-63, STS-84 (to the Russian Mir Station), STS-86, and STS-103 (Hubble Repair mission).

According to Foale, the longer he was on the Space



MICHAEL FOALE, commander of the Expedition 8 mission to the International Space Station, signs autographs at the Training Auditorium.

Station, the more he lost his sense of smell. He exercised three times a day to keep his muscles toned.

During regular maintenance and checkout of the Space Station, he repaired a leaking pressure hose. "The ISS is a remarkable vehicle. All the equipment and experiments are in good shape," Foale said. "I believe, in the future, we could increase the number of crew members living on the Station at one time."

Mean Jeanne: Hurricane damage

Preliminary reports from damage assessment teams who visited the Center Sept. 27 indicated the facility weathered Hurricane Jeanne relatively well, sustaining less damage than was caused by Hurricane Frances three weeks ago.

NASA's three Space Shuttles, Discovery, Atlantis and Endeavour, and International Space Station components were not damaged by the storm. Also, the SWIFT spacecraft, set for an early November launch, was unharmed. There were no reports of injuries to any KSC employees.

Initial assessment shows KSC's landmark facility, the Vehicle Assembly Building, lost another 25 panels during the storm, bringing the total number of panels damaged by the hurricanes to 850. Other previously damaged buildings also sustained additional roof damage and water intrusion.

Hurricane Jeanne brought 3 inches of rain to KSC, compared to 8 inches from Frances. While there were sustained winds of 50 miles an hour or more for 36 hours during Frances, winds of that strength only lasted for 21 hours during Jeanne.



IN THE ORBITER PROCESSING FACILITY, a body flap of an orbiter is covered in plastic, part of the preparation to protect it from possible storm damage. Major parts of the orbiters were wrapped in plastic, including nose caps and wings.







IN PREPARATION for the arrival of Hurricane Jeanne, workers in the Reusable Launch Vehicle Hangar unroll long pieces of plastic to place on shelves holding Thermal Protection System Facility (TPSF) equipment. The TPSF suffered extensive damage from Hurricane Frances, causing the relocation of equipment to the hangar.



A WORKER COVERS large pieces of equipment in Complex 39 Area in preparation for the arrival of Hurr

minimal, preparation saves assets

BEFORE: The Vehicle Assembly Building (left) lost 25 panels during Hurricane Jeanne. There was no damage to the two External Tanks stored inside, or to the Columbia debris which is housed on the 16th floor of the A Tower. The total number of panels damaged by hurricanes is 850.

AFTER: Contractors from Met-Con worked two 10-hour shifts each day to replace aluminum panels lost during Hurricanes Frances and Jeanne with steel panels. With temporary repairs complete, work can continue inside the VAB.



Diller, NASA public affairs officer; Steve Kelly, SGS deputy fire chief; Charles Street, Ned Scheerhorn, Dennis Reddecliff and John Cosat, all RPI emergency management analysts; Roger Scheidt, RPI senior emergency management analyst; and Wayne Kee, NASA emergency preparedness officer.



THE APOLLO/SATURN V building (left) sustained damage after both hurricanes.

DEBRIS LITTERS the railroad track (bottom left) that runs along the shoreline east of KSC's launch pads. The dunes were assaulted by pounding waves and raging winds from category 3 Hurricane Jeanne.

THIS VIEW of the shoreline east of the launch pads at KSC (below) shows the ocean lapping at the base of what appears to be a cliff. The waves and raging winds from Hurricane Jeanne eroded the dunes and shoreline.



the Processing Control Center in the Launch icane Jeanne.





DART aims to hit its target unaided

urrently scheduled to launch Oct. 26 at Vandenberg Air Force Base in California, NASA's Demonstration of Autonomous Rendezvous Technology (DART) is a flight demonstrator that provides a key step in establishing autonomous rendezvous capabilities for the U.S. Space Program.

While previous rendezvous and docking efforts have been piloted by astronauts, the unmanned DART spacecraft will have computers and sensors to perform all of its rendezvous functions. Future applications of technologies developed by the DART project will benefit the nation in future space systems development requiring in-space assembly or other autonomous rendezvous operations.

Developed by Orbital Sciences Corp. of Dulles, Va., the DART spacecraft will be launched on a Pegasus vehicle from its Stargazer L-1011 aircraft. At approximately 40,000 feet over the Pacific Ocean, the

Pegasus vehicle will be released with the DART spacecraft. The vehicle will then boost the spacecraft into approximately a 472-by-479-mile polar orbit.

Once on orbit, DART will travel around the Earth to rendezvous with the target satellite, the Multiple Paths, Beyond-Line-of-Site Communications (MUBLCOM) satellite. Launched in May 1999, the MUBLCOM satellite was used by the Department of Defense as an experimental communications satellite and was outfitted with optical retro reactors designed for future use with a video guidance system, such as the Advanced Video Guidance Sensor (AVGS) onboard DART.

The AVGS is an advanced version of the Video Guidance Sensor developed for NASA's Automated Rendezvous and Capture Project, which demonstrated these automated capabilities in the mid-1990s — including two successful flight tests on board the Space Shuttle. The next-generation AVGS incorpo-



VANDENBERG AIR FORCE BASE in California **Orbital Sciences** technicians observe closely the movement of the DART (Demonstration for Autonomous Rendezvous Technology) flight demonstrator as it is lowered onto a stand. The spacecraft was developed to prove technologies for locating and maneuvering near an orbiting satellite.

rates advanced optics and electronics and allows DART to communicate with and track the MUBLCOM satellite within a range of 5 to 250-plus

meters. The countdown and launch will be managed by the NASA Launch Services Program at Kennedy Space Center.

New One NASA award recognizes successful work behaviors

ASA is accepting nominations for the new One NASA Peer Award
Program, which allows members of NASA (both contractors and civil servants) to recognize and celebrate One NASA behaviors wherever they occur.

What does One NASA behavior look like? Across the Agency, there are employees and contractors who serve as representatives for their home Center on Agency-wide teams. These inter-Center teams work to share lessons learned, increase collaboration, improve communications and more.

They may create programs that increase efficiency and/or make important leadership decisions on behalf of the entire Agency, beyond solely what is best for their Center.

This award provides a way to recognize colleagues from anywhere across the Agency for demonstrating these One NASA behaviors. The program features three "non-monetary" awards with increasing levels of visibility and recognition:

Individual or Team Award: Presented locally at each Center as the behavior is identified.

Center Best Award: All local Individual/Team Award recipients are reevaluated by a Centerwide team led by the Awards Office.

Agency Best of the Best Award: The 11 Center Best Award candidates are reevaluated by the One NASA Team to award one "Best of the Best" Agency-wide award, to be presented in early 2005.

For more information on One NASA behaviors, additional details on the selection criteria and to submit a nomination, please visit the One NASA Web site at http://www.onenasa.nasa.gov.

Brevard Free Weekend at Visitor Complex scheduled

To show its appreciation for the support of Brevard County residents, the Kennedy Space Center Visitor Complex will offer the fifth annual "Salute to Brevard Residents" free weekend Oct. 15-17. Throughout the celebration, Brevard residents may enjoy free admission to the Visitor Complex by showing proof of residency with a driver's license or utility bill.

Hydrogen technology developed at Center



REPRESENTATIVES of Ford Motor Company showcased a new hydrogen fuel cell called "Focus" Sept. 23 at the Kennedy Space Center. The vehicle, which is an example of NASA-inspired fuel cell technology, was displayed at the Center's Visitor Complex. During the visit, NASA Fluid Propellants Manager H. T. Everett addressed the many benefits of the technology and the evolution of its use in markets for electrical power generation.

2004 Intercenter Walk/Run encourages fitness

espite cloudy weather, 179 Spaceport employees participated in the 2004 Intercenter Walk/Run Sept. 21 at the Shuttle Landing Facility. After Dr. Woodrow Whitlow, KSC deputy director, officially started the race, Spaceport employees ran either 5 or 10 kilometers or walked the 2-mile course. The rain moved in once most participants were off the course and a delicious dinner was served afterward.

2004 Intercenter Walk/Run Results:

2-mile walk - female

1. Michelle Goerz 2. Pat Ross 3. Jeannine Paquette

2-mile walk - male

- 1. Vincent Elentri 2. Dave Case
- 3. Charles Ross

2-mile run - female

- 1. Kelley Ristin 2. Lisa Arnold
- 3. Danielle Closen

5-kilometer run - female

- 1. Adrea Dempsey 2. Carol Ball
- 3. Danielle Ford

5-kilometer run - male

- 1. Pete Colangelo 2. Erich Espenschied 3. Tim OíBrien 10-kilometer run - female
- 1. Tammy Foster 2. Vera Murphy 3. Leslie Garner 10-kilometer run - male
- 1. Frank Kapr 2. Sean Black
- 3. Patrick McCormick





ABOVE, DR. WOODROW WHITLOW (with tie), deputy director, talks to a Spaceport employee about the Intercenter Walk/Run. Below, Ray Sullivan finishes the event despite the rain.









Hispanic Heritage Month celebrates culture

By Jeff Stuckey Editor

Americans Making a Difference," Kennedy Space Center will observe Hispanic Heritage Month through Oct. 15. During the month-long tribute, the Spaceport can reflect on the extensive contributions Hispanics have made to KSC, NASA and the nation.

The Hispanic Employment Program Working Group kicked off the celebration Sept. 22 with its 19th annual Hispanic Luncheon at the Kurt H. Debus Conference Center. Guests sampled delicious Hispanic food and enjoyed cultural entertainment.

The guest speaker, Charles Gambaro, a KSC engineer and U.S. military combat engineer group commander, recently returned from Operation Iraqi Freedom.

"One must ask, 'What does making a difference mean?"

Gambaro said. "I think making a difference equates to outstanding leadership, the desire to drive change and to motivate people to accomplish everything they do to the highest standards possible."

As an engineer commander in northern Iraq, Gambaro had to make decisions that affected many people. He commanded about 2,500 soldiers and another 2,000 Iraqi citizens to improve roads and schools and rebuild many buildings, including a number of orphanages.

"We made an impact,"
Gambaro said. "We improved
police stations and provided
electricity to a number of people.
The decisions we made afforded
the citizens of Iraq a chance at a
free life."

Doing this requires bringing together a team of professionals with skills and heritage from all walks of life, according to Gambaro. He finished the emotional speech with a visual presentation of his exploits during his military service in Iraq.

KEYNOTE SPEAKER Charles Gambaro, NASA KSC engineering lead and combat engineering group commander, speaks to the audience during KSC's annual Hispanic American Heritage luncheon at the Kurt H. Debus Center.

Cooper contributed to KSC legacy



Original Mercury Astronauts Scott Carpenter, Gordon Cooper (middle) and John Glenn pose beside an Air Force F-102 jet.

Recury 7 astronaut, died Oct. 5. Cooper piloted the last flight of the Mercury program and later commanded Gemini 5. Jim Kennedy, KSC director, commented on the passing of the legendary astronaut: "Gordon Cooper's legacy is permanently woven into the fabric of the Kennedy Space Center as a Mercury 7 astronaut. His achievements helped build the foundation of success for human space flight that NASA and KSC have benefited from for the past four decades. The KSC family extends condolences to the Cooper family."

Business opportunities highlight Expo 2004 at Port Canaveral

Business Opportunities
Expo 2004, scheduled
from 9 a.m. to 3 p.m. Oct.
19 at Cruise Terminal 4 in Port
Canaveral, is the annual trade
show sponsored by the NASA/
Kennedy Space Center Small
Business Council, 45th Space
Wing and Canaveral Port

Authority. The event will feature more than 175 businesses and government exhibits.

Exhibitors will include vendors from a variety of products and services. Representatives of NASA, the 45th Space Wing and prime contractors will give out information and answer questions about doing business with their organizations.

Bus service will be available hourly from four locations from 8:30 a.m. to 3 p.m. One bus will begin at the HQ building, stop at the SSPF and also pick up at the E&L Bldg. at CCAFS. A second

bus will leave the east side of the OSB and proceed directly to the port.

Admission is free. For information, call Gloria Marsh at (321) 867-7353 or e-mail at Gloria.Marsh-1@nasa.gov.

Center recognizes disabled employees' contributions

Tith the theme "You're Hired! Success Knows No Limitations," the Disability Awareness and Action Working Group will sponsor a breakfast at 8:30 a.m. Oct. 13 in the Kurt H. Debus Conference Center in recognition of National Disability Employment Awareness Month. The guest speaker, Jennifer Sheehy Keller, is the president's appointed special assistant for employment to the assistant secretary of the Office of Special Education and Rehabilitation Services. Tickets for the breakfast are \$15 and can be purchased from the Equal Opportunity office, room 2321 in the Headquarters building. For information, visit http://www.ksc.nasa.gov/nasa-only/groups/daawg/index.htm.



John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by External Relations and Business Development in the interest of KSC civil service and contractor employees.

Contributions are welcome and should be submitted two weeks before publication to the Media Services Branch, IDI-011. E-mail submissions can be sent to Jeffery.Stuckey@ksc.nasa.gov

Managing editor. Bruce Buckingham Editor. Jeff Stuckey Copy editor Corey Schubert

Editorial support provided by InDyne, Inc. Writers Group. NASA at KSC is located on the Internet at http://www.ksc.nasa.gov USGPO: 733-133/600066